



**Safe, clean drinking water
on tap anywhere, anytime.**

MULTI-MODULE AUTOMATED ULTRAFILTRATION UNITS

High volume output

Pathogen-free low cost
water

High performance long-life
ultrafiltration membranes

Minimal operator
attendance by non-
technical persons

Simple plug-in connections
– no hard wiring

Low power consumption

Lightweight and portable

Fully automated operation
by system controller

Smart all-in-one interface
with advanced monitoring

Patented self-cleaning/
backwash process

Quick & easy setup and
hassle-free operation

Stand-alone capability



MEMPRO-MIDI (*nominal 10 kL/day*)
Single (1) module automated

MEMPRO-MONO (*nominal 20 kL/day*)
Single (1) module automated

MEMPRO-DUAL (*nominal 40 kL/day*)
Dual (2) module automated

MEMPRO-TRI (*nominal 60 kL/day*)
Triple (3) module automated

MEMPRO-QUAD (*nominal 80 kL/day*)
Quad (4) module automated

Ideal Solution for Commercial & Domestic Clean Drinking Water and RO Pre-Treatment

Low cost, safe potable water with minimal operator attendance, stand-alone capability and low power consumption is now available.

The unique range of MEMPRO™ MKII ultrafiltration units provide sustainable safe clean water solutions for numerous applications using simple “plug-in” connections. This makes for quick & easy set up and user-friendly operation. Non-technical operators find the MEMPRO™ MKII a breeze to use particularly with intuitive controller inputs and no hard wiring required to get started. What's more with low energy consumption the MEMPRO™ MKII saves money on power and can even run on solar if needed. And, when gravity feed is available the need for a supply pump can be eliminated.

Advanced Ultrafiltration Membrane System

MEMPRO™ MKII delivers enhanced system intelligence, reliability and regulatory compliance for drinking water applications. It features a smart all-in-one controller that provides real-time, advanced monitoring while the integrated In-situ Pressure Decay Test (PDT) enables membrane integrity verification to support compliance with drinking water quality regulations. The optimised design also incorporates only five valves per system, motorised fail-safe ball valves and a dedicated air blower and compressor.

ECO-FLUSH™ Self-Cleaning Process

The key feature for successful operation of the MEMPRO™ MKII is the effectiveness of its backwash process, which uses low-pressure aeration to maintain a clean membrane surface even with highly turbid feed waters. This unique process replaces the old conventional inside-outside reverse flush backwash operation and instead relies on an aggressive shell-scour protocol to scrub clean the filter membrane during cleaning cycles. Not only are filter membranes refreshed but the system also lasts longer – particularly when the process is periodically augmented with a chemical clean or CIP (Clean In Place) to remove residual fouling.



Typical Applications

- Decentralised water treatment systems
- Community and rural small-scale systems
- Remote mining and resource communities
- Filtration of surface water, groundwater and recycled water*
- Emergency and temporary water supplies
- Hotels/restaurants/resorts
- Bottled water production
- RO (reverse osmosis) pre-treatment

*Not suitable for use with water sources containing chemical compounds

Specifications



MEMPRO-MIDI Single (1) module automated

Typical auto ultrafiltration unit production capacity treating clean surface water:

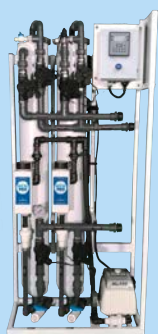
Litres/min (nominal)	9	Dimensions	Weight
Net kL/day (nominal)	10	Height: 105 cm	Individual Weight: 27 kg
Litres/day (nominal)	10,000	Depth: 33 cm	
US Gallons/day (nominal)	2,600	Width: 42 cm	



MEMPRO-MONO Single (1) module automated

Typical auto ultrafiltration unit production capacity treating clean surface water:

Litres/min (nominal)	18	Dimensions	Weight (kg-dry)
Net kL/day (nominal)	20	Height: 161 cm	Weight: 50 kg
Litres/day (nominal)	20,000	Depth: 34 cm	
US Gallons/day (nominal)	5,200	Width: 51 cm	



MEMPRO-DUAL Dual (2) module automated

Typical auto ultrafiltration unit production capacity treating clean surface water:

Litres/min (nominal)	36	Dimensions	Weight (kg-dry)
Net kL/day (nominal)	40	Height: 161 cm	Weight: 70 kg
Litres/day (nominal)	40,000	Depth: 34 cm	
US Gallons/day (nominal)	10,400	Width: 71 cm	



MEMPRO-TRI Tri (3) module automated

Typical auto ultrafiltration unit production capacity treating clean surface water:

Litres/min (nominal)	54	Dimensions	Weight (kg-dry)
Net kL/day (nominal)	60	Height: 161 cm	Weight: 90 kg
Litres/day (nominal)	60,000	Depth: 34 cm	
US Gallons/day (nominal)	15,654	Width: 91 cm	



MEMPRO-QUAD Quad (4) module automated

Typical auto ultrafiltration unit production capacity treating clean surface water:

Litres/min (nominal)	72	Dimensions	Weight (kg-dry)
Net kL/day (nominal)	80	Height: 161 cm	Weight: 110 kg
Litres/day (nominal)	80,000	Depth: 34 cm	
US Gallons/day (nominal)	20,872	Width: 111 cm	

Technical Data

Typical Application

Filtration of surface water, groundwater or brackish water for potable or RO pre-treatment applications. NOTE: Not suitable for use with water sources containing chemical contamination.

Typical auto ultrafiltration unit production capacity treating clean surface water

Model Number		Net kL/day (nominal)	Litres/day (nominal)	US Gallons/day (nominal)
MEMPRO-MIDI	Single Module Unit	10	10,000	2,600
MEMPRO-MONO	Single Module Unit	20	20,000	5,200
MEMPRO-DUAL	Dual Module Unit	40	40,000	10,400
MEMPRO-TRI	Triple Module Unit	60	60,000	15,654
MEMPRO-QUAD	Quad Module Unit	80	80,000	20,872

Membrane Module Details

MEMCOR® membrane filtration module polyvinylidene fluoride (PVDF) hollow fibre ultrafiltration membrane with nominal pore size 0.04 µm

Materials of Construction:

Module Housing Assembly	Food grade polyethylene (PE)
Valves	Stainless steel (SS) motorised ball type
Seals and Gaskets	EPDM typical
Pipe and Fittings	Various including PE, ABS, nylon and PVC

"Filter" Mode Operation

Pressurised outside to inside filtration. Automatic standby on feed and filtrate storage levels via level switch inputs (where fitted). Automatic backwash at preset filtration intervals.

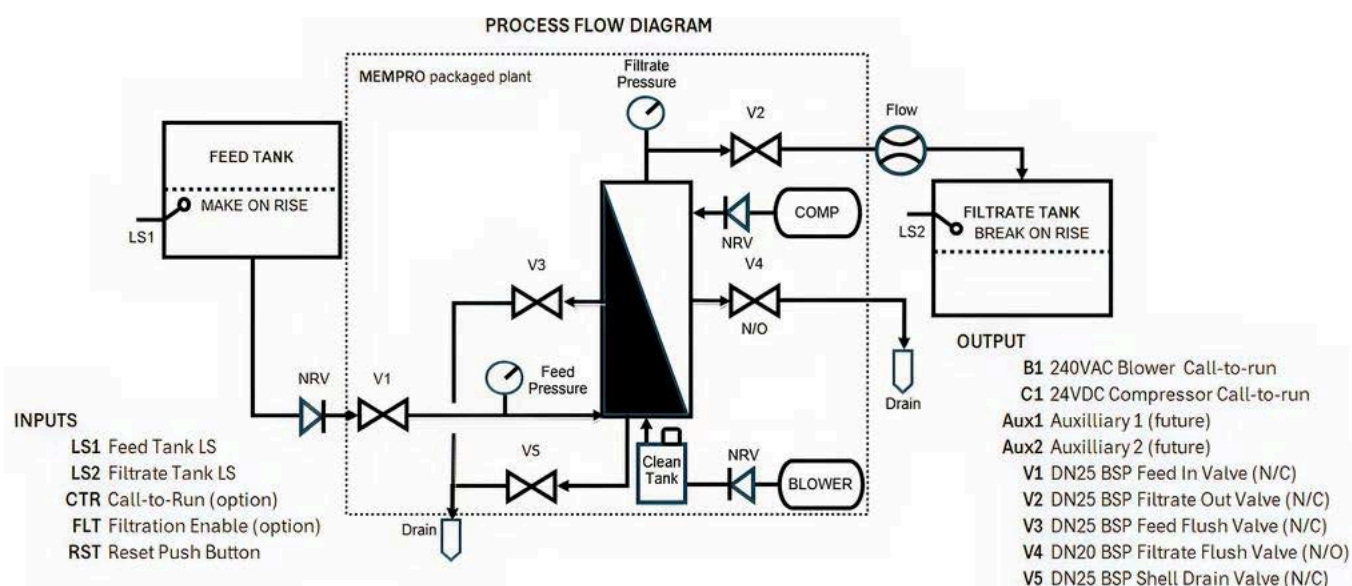
"Clean" Mode Operation

Semi-automatic Clean In Place (CIP) cycle. Chemicals are prepared by the operator and added to the clean tank with operator prompts to start and advance the cleaning cycle.

"PDT" Mode Operation

Semi-automatic Pressure Decay Test (PDT) cycle. The operator is prompted every 24 filtration hours for a PDT to be performed.

Process Flow Diagram





ULTRAFILTRATION

WILL REMOVE:

PATHOGENS (disease causing organisms) removed (to log reduction value > 4 LRV) by ultrafiltration include:

Bacteria	Total coliform TC
Protozoa	Cryptosporidium and Giardia
Cysts	E. coli
Helminths	Virus

TURBIDITY (DIRT)

TOTAL SUSPENDED SOLIDS (TSS)

IRON & MANGANESE

ARSENIC MANGANESE

The World Health Organisation (WHO) reports that ultrafiltration provides complete removal of bacteria and viruses (disease causing pathogens) as outlined in WHO document "GUIDELINES FOR DRINKING WATER QUALITY" under "Treatment Process" as referenced in the WHO website.



ULTRAFILTRATION

WILL NOT REMOVE:

CHEMICALS: Arsenic (unless first oxidised), Cadmium, Chromium, Copper, Cyanide, Fluoride, Lead, Mercury, Nickel, Nitrate, Nitrite, Sulphate

MINERALS (HARDNESS)

SALINITY AND SALTS

TOTAL DISSOLVED SOLIDS (TDS)

UNPLEASANT TASTE AND ODOUR

International Registered Patent – WO/2006/074519

The information provided in this literature contains merely general descriptions or characteristics of performance which in actual case of use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of the contract.

© Copyright 2026 – SafeWater Solutions

Ultrafiltration Removal Criteria

(to 0.04µm nominal)

MEMPRO™ MKII Ultrafiltration

Pathogen-free water at low cost and minimal operator attendance is just the start of the MEMPRO™ MKII range of ultrafiltration units. The units have stand-alone capability that requires no additional equipment to operate other than a water tank and pump. Connections are also "plug-in", and require no hard-wiring, making for a quick and easy setup. The units also have low power consumption and solar power or gravity flow is optional.

Self-cleaning ECO-FLUSH™ Process

The effectiveness of the MEMPRO™ MKII relies on its self-cleaning ECO-FLUSH™ process using low pressure aeration to maintain a clean membrane surface.

The shell-scour protocol does not rely on conventional inside-outside reverse flush backwash operation. Neither air nor water reverse flow is engaged during the backwash cycle. The system uses a low energy source for the intermittent purge of contaminants.

The system controller fully automates operation of the filtration. Backwash cycles are typically 30 minutes during filtration (as preset by operator) and periodically the unit requires a chemical clean or CIP (Clean in Place) to remove residual fouling.

Provision is made for a level switch input from a feed supply tank and a level switch from a filtrate storage tank. These inputs may be used to pause the filtration operation as the liquid levels in the feed or filtrate storage systems change.

Long-life high performance membrane modules

The membrane filtration modules uses MEMCOR high permeability, low fouling PVDF hollow fibre membranes for optimum performance and long life. The modules are simple in design, easy to install and maintain. Thousands of membrane plants globally rely on MEMCOR membrane modules for their water filtration requirements.

Choose the simple, affordable solution for safe, clean drinking water, wherever you need it.